US Army Corps of Engineers

Regulatory Division
1455 Market Street
San Francisco, CA 94103-1398

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

Project: Cargill Solar Salt System Maintenance

NUMBER: 2008-00160S DATE: June 30, 2008 RESPONSE REQUIRED BY: July 30, 2008

PROJECT MANAGER: Paula Gill PHONE: 415-503-6776 Email: Paula.C.Gill@usace.army.mil

1. INTRODUCTION:

Cargill, Incorporated (Cargill, 7220 Central Avenue, Newark, California, 94560) has applied for a Department of the Army permit to perform maintenance within Cargill's Solar Salt System, consisting of approximately 75 miles of levees, 12,100 acres of salt evaporation ponds, plant sites, and nearby areas in south San Francisco Bay (figure 1) for 10 years.

The purpose of the proposed project is to provide for continued maintenance of levees, water control structures, and other existing structures. These activities would facilitate continued industrial salt production and access for land management activities. In November of 1995, a similar authorization (19009S) was issued to Cargill. Since 2003, the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) have been working under this authorization on properties that have been transferred from Cargill. Cargill and USFWS/CDFG have independently applied for similar new Corps authorizations.

The project area includes the Newark Plant 1 and Plant 2 pond complexes (including the Newark crystallizer facility), as well as the Redwood City Plant and pond 3C of the Baumberg complex (also known as Eden Landing). Newark Plant 1 contains 15 evaporator ponds and occupies approximately 4,100 acres of bay shoreline near Newark, Alameda County. Newark Plant 2 includes 6 evaporator ponds and 38 processing ponds and crystallizer beds used in the final stages of salt production, covering approximately 6,400 acres along the Newark shoreline of the South Bay. Pond 3C is a non-operating, 166-acre pond located in the former Baumberg complex near Union City, Alameda County. The Redwood City Plant contains 17 processing ponds and crystallizer beds and occupies approximately 1,433 acres east of Redwood City in San Mateo County.

This application is being processed pursuant to provisions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403) and Section 404 of the Clean Water Act (33 U.S.C. Section 1344).

2. PROPOSED PROJECT:

Annual Reporting Requirements:

Two annual reports would be required. The first annual report (referred to as the advanced notification) would consist of a draft work plan for the coming year. Along with other information this plan would include work locations, best management practices, linear extent of work, specified dredge locks, and proposed work timeframes. The second annual report would summarize work completed in the previous year. Each of these reports would be sent to all interested parties including the Corps of Engineers, the USFWS, the National Marine Fisheries Service (NMFS), the U.S. Environmental Protection Agency

(US EPA), the CDFG, and the San Francisco Bay Conservation and Development Commission (BCDC), and the San Francisco Bay Regional Water Quality Control Board (RWQCB).

All parties would have two weeks to review the reports and to provide comments to the Corps. Based on the input received, the regulatory agencies would direct the permittee (Cargill) to change the plan accordingly.

Repair, replacement, and servicing of existing facilities:

Activities would include: a) repair and replacement of existing bay intake structures, brine control structures, and related facilities such as pumps, gates, pipelines, siphons, open channels and culverts, and removal of silts and algae from these structures. Excavated material would be placed in an identified upland area unless specified otherwise in the advanced notification.

b) Excavating, clearing, and re-trenching of existing intake structures and brine conveying ditches so long as the existing configuration is not altered substantially. Excavated material would be disposed of onto levee tops above the plane of the high tide or hauled off-site to a non-jurisdictional area.

c) Repair and replacement of existing bridges, bridge foundations and abutments within the network of salt pond levees.

d) Repair and replacement of other items such as existing fences, tide gates, siphons in non-tidal areas, power lines, etc, provided such repair and maintenance are for existing infrastructure.

e) Repair of existing authorized reaches of riprap. The authorized riprap areas would be designed to have approximately 4:1 slope. If additional work would exceed the existing reach, by 10 linear feet or more, then the proposed design would be submitted in the advanced notification.

Ongoing Work:

Activities qualifying as ongoing and new work may require site specific review and approval by all relevant agencies (i.e. the USFWS, NMFS, US EPA, CDFG, the BCDC, and the RWQCB). This evaluation would occur upon submittal of the advanced notification.

Such activities could include: a) Placement of dredged and fill material on the pond side of salt pond levees below the plane of high water for the purpose of raising and fortifying the levees to prevent degradation and to protect the salt ponds. The material, either dredged mud from the salt pond or imported fill, would be placed along the inside and the top of the salt pond levee in accordance with Best Management Practices. Alternatively, where possible, slough mud from outside the ponds may be used if the dredge has sufficient reach.

b) Dredging of existing borrow ditches within the salt ponds for the purpose of placing the dredged material on existing levees. This would be performed by a dredge of some type, but likely Cargill's dredge, the *Mallard*.

c) Dredging in salt ponds to allow a dredge to cross a pond. This includes the placement of dredge material within the pond. Placement of dredged material within the pond would occur on the pond bottom along the side of the dredged channel.

d) Dredging of and placement of dredged material at 14 existing dredge locks, and at any newly constructed authorized dredge locks, to allow the dredge to access the salt ponds. Advanced notification for these activities would include specific quantities of material to be dredged and placed, and drawings indicating pre-staked, designated areas for stockpiling, side casting and borrowing material. Breached levee material, stockpiled atop the main levee from the last time the lock was accessed will be used to dam the breach following entry. Upon dredge exit, breaching and plugging levees in a similar fashion to that

described above. The salt marsh muds that were excavated and sidecast in the access cut would be retrieved and placed back into the access cut and channel, closing behind the dredge. Upon dredge exit, a small culvert will be inserted into the lock at an elevation that would allow appropriate circulation of high tides into the lock basin to prevent the accumulation of undesired sediments figure 2).

e) Dredging within shallow sloughs to provide up to four feet of clearance for access by the dredge to salt ponds. Dredge material that cannot be placed on salt pond levees may be placed on bar mud flats or sidecast following approval in accordance with the notification procedure. Some slough dredging may also be performed near dredge locks for the purpose of obtaining additional mud to bring the access cut fills to the desired elevation following the dredge access.

f) Repair and placement of siphons that cross salt marsh, sloughs and channels that would require extensive trenching and side-casting of mud.

g) Dredging and placement of bay muds into eroded areas along selected outboard levees with the purpose of encouraging the expansion of established salt marsh vegetation to diffuse wave energy and prevent levee erosion. The quantities of dredging material to be moved would depend on site specific conditions and would be included in the notification procedures. The desired height of the constructed mounds will approximate the high-tide elevation.

h) Dredging a “sump” approximately 75 feet by 75 feet by 2 ½ feet deep in the mud flat of a slough in the immediate vicinity of a staked access cut to dredge lock, placing the dredge mud on an adjacent levee (within reach of the dredge). The “sump” will serve as a receptacle for accessing dredge material from cutting the access channel.

New Work:

a) Installation of new intake and brine control structures, new pumps, siphons, culverts, power transmission lines channels/ditches, crossing of channels and streams, in conjunction with new work, or relocation of existing structures.

b) Construction of new pumping donuts, internal coffer dams, and internal salt pond levees.

c) Dredging of new borrow ditches within the salt ponds for the purpose of maintaining existing levees through the placement of dredge material.

d) Placement of new riprap made up mostly of small pieces of demolition rubble along outboard and inboard levees as needed to fortify the slopes and prevent erosion, so long as the permittee has adequately demonstrated that the proposed new riprap is placed below the high tide line and/or high pond level at a slope of about 4:1 where needed, taking care to minimize the number of voids between the rubble that might be utilized by red fox. Riprap placed on top of non-eroding salt marsh is not authorized.

3. **COMPLIANCE WITH VARIOUS FEDERAL LAWS:**

National Environmental Policy Act of 1969 (NEPA): The Corps will assess the environmental impacts of the proposed action in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. Section 4371 et. seq.), the Council on Environmental Quality's Regulations (40 C.F.R. Parts 1500-1508), and the Corps' Regulations (33 C.F.R. Part 230 and Part 325, Appendix B). Unless otherwise stated, the Environmental Assessment will describe only the impacts (direct, indirect, and cumulative) resulting from activities within the Corps' jurisdiction. The documents used in the preparation of the Environmental Assessment will be on file with the U.S. Army Corps of Engineers, San Francisco District, Regulatory Branch, 1455 Market Street,

San Francisco, California 94103-1398.

Endangered Species Act of 1973 (ESA): Section 7 of the Endangered Species Act requires formal consultation with the USFWS and the NMFS if a Corps permitted project may adversely affect any federally listed species or their designated critical habitat.

Several listed species are known to occur within the proposed project vicinity, including seven federally listed species: salt marsh harvest mouse (*Reithrodontomys raviventris*), California clapper rail (*Rallus longirostris obsoletus*), western snowy plover (*Charadrius alexandrinus nivosus*), California least tern (*Sterna antillarum browni*), California brown pelican (*Pelecanus occidentalis californicus*), central California coast steelhead (*Oncorhynchus mykiss*), and its Critical Habitat, and green sturgeon (*Acipenser medirostris*). Section 7 Consultation under the Federal Endangered Species Act is currently in progress and the issuance of Biological Opinions from both agencies are pending.

Magnuson-Stevens Fisheries Conservation and Management Act: Essential Fish Habitat - The Magnuson-Stevens Fishery Conservation and Management Act requires all Federal agencies to consult with the NMFS on all actions, or proposed actions permitted by the agency that may adversely affect Essential Fish Habitat (EFH).

Effects on EFH associated with the Coastal Pelagics, Pacific Groundfish, and Pacific Coast Salmon Fisheries Management Plans are being considered in coordination with NMFS. The NMFS' EFH conservation recommendations are pending.

Clean Water Act of 1972 (CWA):

a. Water Quality: Under Section 401 of the Clean Water Act (33 U.S.C. Section 1341), an applicant for a Corps permit must first obtain a State water quality certification before a Corps permit may be issued. No Corps permit will be granted until the applicant obtains the required water quality certification. The Corps may assume a waiver of water quality certification if the State fails or refuses to act on a valid request for certification within 60 days after the receipt of a valid request, unless the District Engineer determines a shorter or longer period is reasonable for the State to act.

Those parties concerned with any water quality issue that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612 by the close of the comment period of this Public Notice.

b. Alternatives: Evaluation of this proposed activity's impact includes application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b)(1) of the Clean Water Act (33 U.S.C. Section 1344(b)). An evaluation has been made by this office under the guidelines and it was determined that the proposed project is water dependent.

Coastal Zone Management Act of 1972 (CZMA): Section 307 of the Coastal Zone Management Act requires the applicant to certify that the proposed project is consistent with the State's Coastal Zone Management Program, if applicable. The proposed project is within the Coastal Zone. No Corps permit will be granted until the applicant obtains the required consistency determination.

National Historic Preservation Act of 1966 (NHPA): Maintenance activities of the same nature have been occurring within the project area for many years. Any potential historic resource would have already been discovered. However, if unrecorded resources are discovered, operations will be suspended until the Corps completes consultation with the State Historic Preservation Office (SHPO) in accordance with Section 106 of the National Historic Preservation Act.

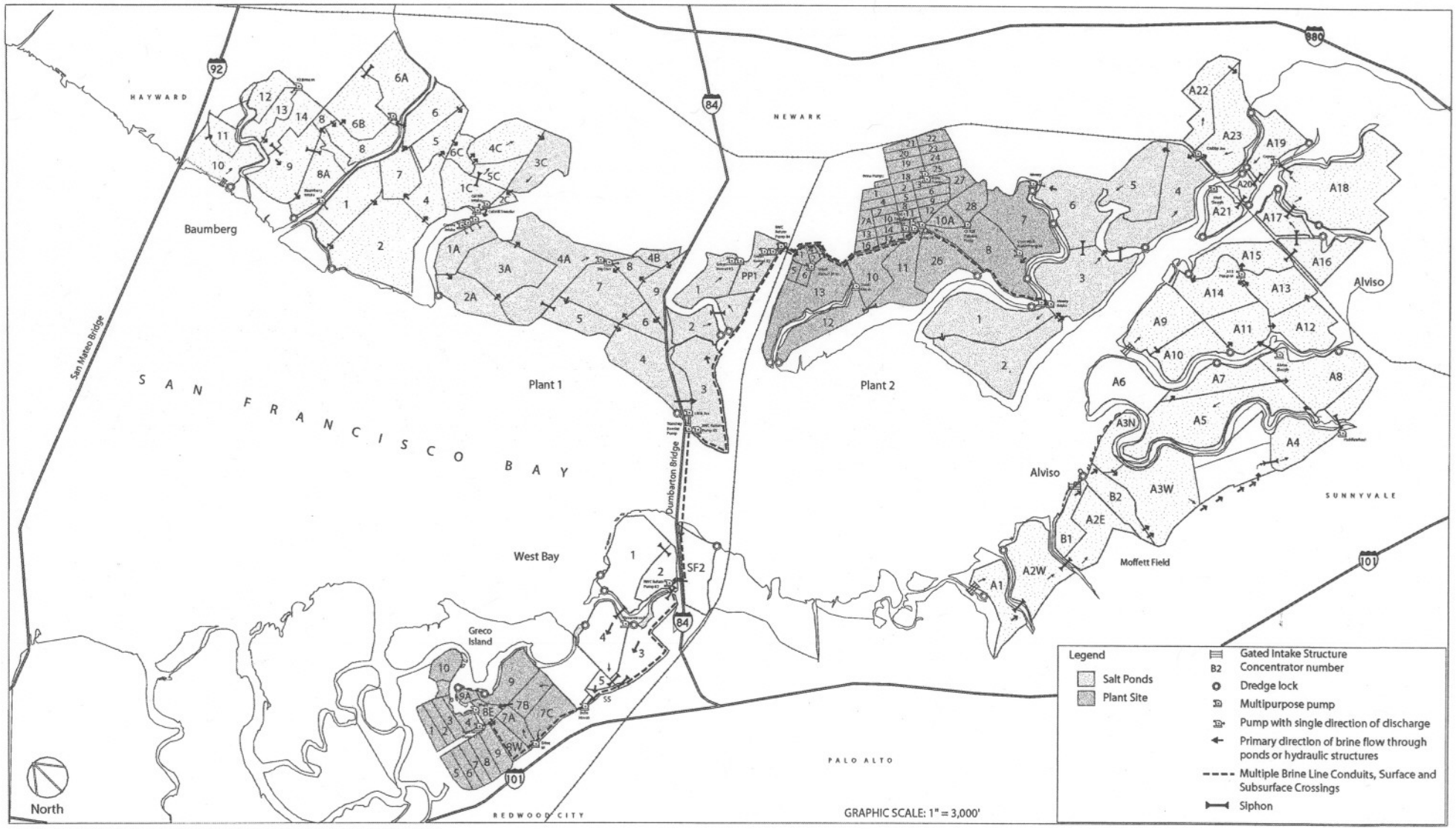
4. **PUBLIC INTEREST EVALUATION:**

The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits that reasonably may be expected to accrue from the proposed activity must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered, including its cumulative effects. Among those factors are: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

5. **CONSIDERATION OF COMMENTS:** The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest in the proposed activity.

6. **SUBMISSION OF COMMENTS:** Interested parties may submit, in writing, any comments concerning this activity. Comments should include the applicant's name and the number and the date of this Public Notice, and should be forwarded so as to reach this office within the comment period specified on Page 1. Comments should be sent to the U.S. Army Corps of Engineers, San Francisco District, Regulatory Branch, 1455 Market Street, San Francisco, California 94103-1398. It is the Corps' policy to forward any such comments that include objections to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this Public Notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Additional details may be obtained by contacting the applicant whose name and address are indicated in the first paragraph of this Public Notice or by contacting Paula Gill of our office at telephone (415) 503-6776 or E-mail: Paula.C.Gill@usace.army.mil. Details on any changes of a minor nature that are made in the final permit action will be provided upon request.

Cargill Salt's Base Map - 2008



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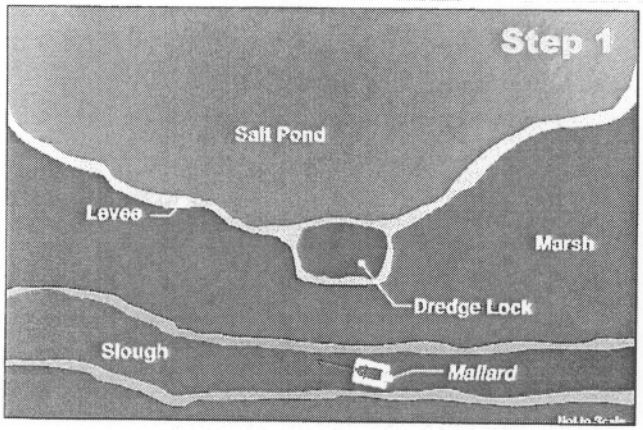
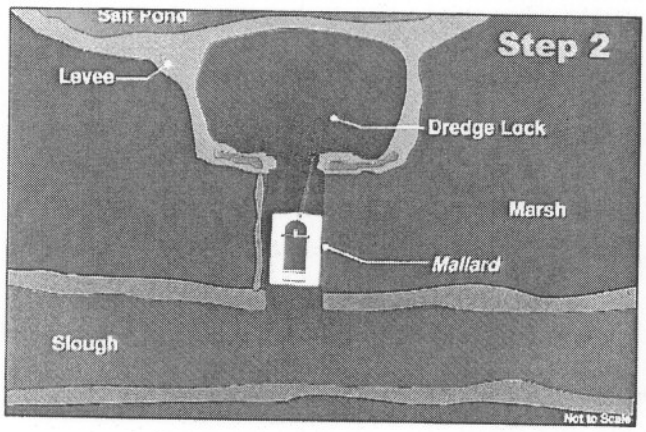
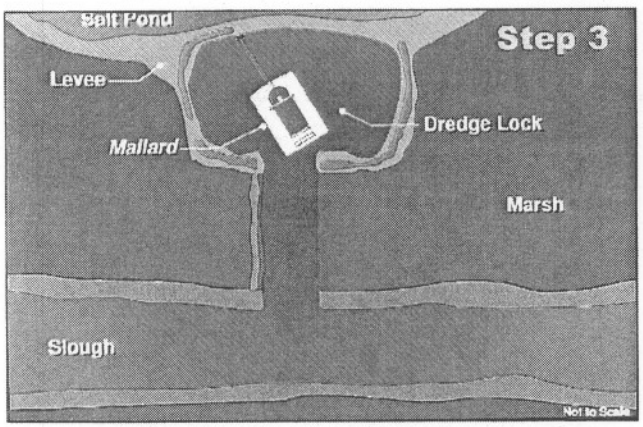


What's a dredge lock?

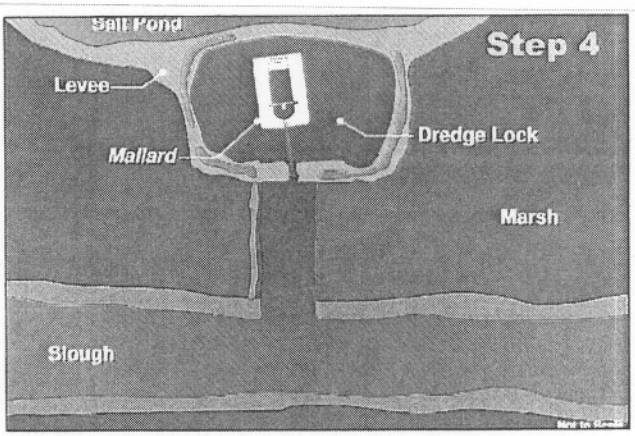
Dredge locks are small earthen structures, approximately one to three acres in size, that allow the *Mallard,* Cargill's maintenance vessel, to access a system of salt ponds from the adjoining slough or the bay with minimal mixing of brines and bay water and no discharge of brines into San Francisco Bay.



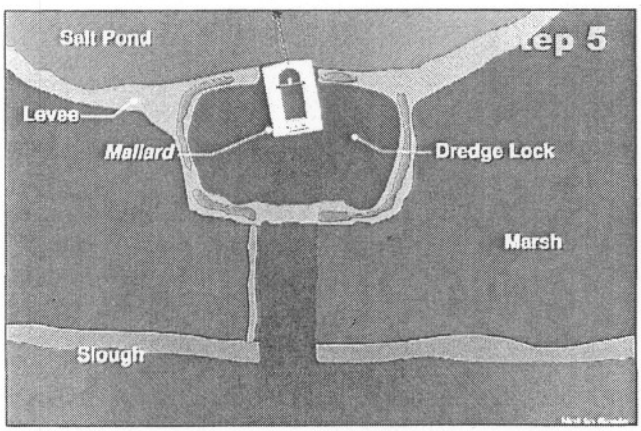
The *Mallard,* which pulls itself along with its clamshell, normally must cut through a shelf of marsh vegetation to reach a lock. If the lock is within reach of the boom, excavated materials will be placed on the lock sides. More typically, locks require dredged muds to be temporarily placed to the side of the access cut. The 36-foot *Mallard* normally makes a cut about 40 feet wide. The *Mallard 's* crew excavates the minimum amount necessary to float into the dredge lock on a high tide.



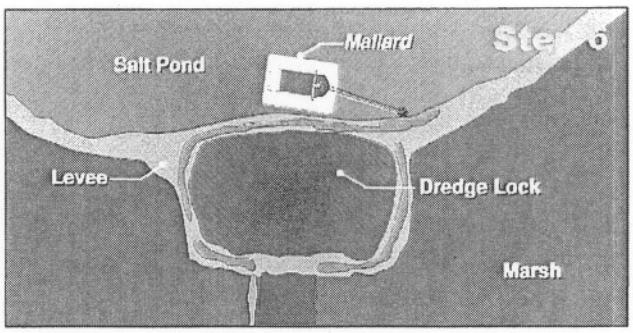
Once in the access cut, the *Mallard* cuts a temporary breach in the lock levee, then pulls itself up to the dredge lock and floats through at high tide.



Once inside the lock, the *Mallard* turns and closes the lock behind itself.



The *Mallard* then turns once again, breaches the pond levee and enters the pond



The lock is then closed. Once inside the salt ponds, the *Mallard* pulls muds from the "borrow pit" inside the salt ponds and places the dredged muds on the levee tops to compensate for subsidence and wind and wave erosion. The same process is repeated in reverse when leaving the pond system. The *Mallard* replaces the displaced muds in